

RCRA CONTINGENCY PLAN
Implementation Report No. 93-004

**RCRA CONTINGENCY PLAN
IMPLEMENTATION REPORT
ROCKY FLATS PLANT
EPA ID NUMBER CO7890010526**

This report is made in compliance with the requirements of 6 CCR 1007-3, Parts 264.56 (j) and 265.56 (j) for a written report within 15 days of the implementation of the RCRA Contingency Plan. The requirements for this are given below and will be addressed in the order listed, excerpted from 6 CCR 1007-3, Parts 264.56 and 265.56:

"(j)...Within 15 days after the incident, he must submit a written report on the incident to the department. The report must include:

- (1) Name, address, and telephone number of the owner or operator
- (2) Name, address, and telephone number of the facility
- (3) Date, time, and type of incident (fire, explosion)
- (4) Name and quantity of material(s) involved
- (5) The extent of injuries, if any
- (6) An assessment of actual or potential hazards to human health and the environment, where this is applicable; and
- (7) Estimated quantity and disposition of recovered material resulted from the incident."

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- (1) Name, address and telephone number of the owner of the facility:

United States Department of Energy
Rocky Flats Plant
Post Office Box 928
Golden, Colorado 80402
(303) 966-2025

Facility Contact:
A. H. Pauole, Acting Manager

- (2) Name, address and telephone number of the facility:

U.S. Department of Energy
Rock Flats Plant
Post Office Box 928
Golden, Colorado 80402
(303) 966-2025

ADMIN RECORD

(3) DATE, TIME AND TYPE OF INCIDENT:

A. SUMMARY:

The RCRA Contingency Plan was implemented on March 22, 1993, due to a release of approximately one gallon of contaminated waste water onto an asphalt surface near building 559.

The release occurred at 2:00 p.m. on Monday, March 22, 1993. Water from the P304 sump had been pumped into a tanker truck prior to treatment. Rocky Flats Transportation Guidelines allow usage of only four-fifths of the capacity of the tanker, and the truck was over-filled. To be within the transportation guidelines, water had to be pumped out of the tanker truck into 55-gallon drums. The effort of off-loading water from the truck into drums was performed without incident. The spillage occurred when the hose used to off-load the tanker was being transferred back to the storage location; approximately 1 gallon of water drained on to the asphalt from the four inch diameter hose.

Based on the results of previous analytical testing, several hazardous waste constituents have been detected in the P304 sump that is located between Buildings 559 and 561. The exact source of the contamination is unknown. The level of contamination exceeds Segment 5 stream standards established by the Colorado Water Quality Control Commission.

A portion of the release immediately evaporated due to the ambient air temperature and a portion was absorbed by the asphalt; an absorbent material (oil-dri) was applied to the remainder of the release; it was cleaned up and is being managed as a RCRA-regulated waste.

The use of spill pans during transfer operations has been implemented to decrease the risk to human health and the environment.

B. SYSTEM DESCRIPTION:

The purpose of the P304 sump is to collect water that has been diverted from the exterior of nearby underground structures (i.e., Building 559/561 tunnel and Building 561 basement). The water is then pumped through piping to a nearby storm drain which outfalls northwest of Building 559 into the surface water drainage system. On March 5, 1993, Operations Management became aware that constituents in the water were above stream standards. The sump pump was then shut down because of water quality concerns.

The water level rose in the sump, and water eventually began migrating through the foundation walls of Building 561. This was discovered during a daily RCRA inspection on March 15, 1993. Water that infiltrated Building 561 was collected in 55-gallon drums and subsequently transferred to a tanker. To prevent further leaking, water was pumped from the P304 sump into the tanker truck until a decision could be made on the correct method of disposal or treatment of the contaminated waste water. Once the contaminated water is removed and containerized, it must be managed as hazardous waste due to the presence of Hazardous constituents.

C. DESCRIPTION OF INCIDENT:

The capacity of the tanker truck is 5000 gallons, but Rocky Flats Transportation Guidelines restricts the maximum allowable amount of solution to 4000 gallons. When the water was pumped into the tanker from the sump, the total amount exceeded the allowable amount. To be within the transportation guidelines, water was pumped out of the tanker into 55-gallon drums.

The effort of off-loading water from the tanker into drums, was performed without incident. The spillage occurred when the hose used to off-load the tanker was being transferred back to the storage location; approximately 1 gallon of contaminated waste water drained on to the asphalt from the four inch diameter hose. This contaminated water (once removed and containerized) is being managed as RCRA-regulated hazardous waste due to the presence of Hazardous constituents.

D. CORRECTIVE ACTION:

Direction was given to use oil-dri to absorb the water and to manage the absorbent as hazardous waste. Containment of the released material was attempted; however, a portion of the release immediately evaporated due to the ambient air temperature and a portion was absorbed by the asphalt. The absorbent material (oil-dri) was applied to the remainder of the release; it was then cleaned up and is being managed as a RCRA-regulated waste.

Based on the extent of the release, the immediate removal of the affected asphalt is not required because the contamination constituents in the asphalt do not pose an unacceptable risk to human health or the environment.

Use of spill pans during transfer operations has been implemented to decrease the risk of unplanned releases.

(4) NAME AND QUANTITY OF MATERIAL INVOLVED:

Approximately one gallon of contaminated waste water was released onto the asphalt. This contaminated water (once removed and containerized) is being managed as RCRA-regulated hazardous waste. The water was collected from Building 561 where it had migrated through the foundation walls into the building. Based on the results of analytical testing, hazardous waste constituents were identified as carbon tetrachloride, trichloroethylene and 1,1-dichloroethylene. In addition, all hazardous waste constituents were found in amounts below RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits. This is based on four sampling events that took place from July 1992 through March 1993. The exact source of the contamination is unknown. The levels of contamination exceed Segment 5 stream standards established by the Colorado Water Quality Control Commission (see Table 1).

(5) EXTENT OF INJURIES:

There were no injuries.

(6) **AN ASSESSMENT OF ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH AND ENVIRONMENT:**

The total amount of released material was not directly recoverable because of evaporation and absorption into the asphalt. Based on previous analytical results and the extent of the release, the immediate removal of the affected asphalt is not required because the contamination constituents in the asphalt should not pose an unacceptable risk to human health or the environment.

(7) **ESTIMATE QUANTITY AND DISPOSITION OF RECOVERED MATERIAL THAT RESULTED FROM THE INCIDENT:**

Approximately two pounds of partially damp oil-dri was recovered and is being managed as a RCRA-regulated waste because the cleanup material contained waste water contaminated with constituents listed in Table 1. It was sealed in a plastic bag and placed in a 55-gallon drum in Satellite Accumulation Area #562-560.

TABLE 1
Data Showing the Average Value over Four Sampling
Events as Compared to Regulatory Standards

<u>Analyte</u>	<u>Result Average</u>	<u>RCRA TCLP Limits</u>	<u>CWQCC Segment 5 Stream Standards</u>	<u>Drinking Water MCL</u>
Carbon tetrachloride	245 ppb	500 ppb	18 ppb	5 ppb
1,1-dichloroethylene	48 ppb	700 ppb	57 ppt	7 ppb
Trichloroethylene	178 ppb	500 ppb	66 ppb	5 ppb

Definitions:

TCLP - Toxicity Characteristic Leaching Procedure

CWQCC - Colorado water quality Control Commission

MCL - Maximum Contaminant Levels (source: 40 CFR Part 141)

ppb - parts per billion

ppt - parts per trillion